

<sup>2</sup> The Court recognizes that Plaintiff, Jamie S. Leach, is the owner of the ‘ 164 Patent. In Plaintiffs submissions to the Court, when addressing the prosecution history, Plaintiffs reference actions taken on behalf of Ms. Leach by her patent attorney and refer to her attorney as “Applicant’s Attorney.” For ease of reference, however, the Court simply refers to “Plaintiffs” throughout this

The Court has conducted a claim construction hearing<sup>3</sup> and heard argument of counsel. The parties did not present any expert testimony and agree no such testimony is needed for claim construction.

Each of the terms disputed by the parties appear in Claim 1 of the '164 Patent. Claim 1 provides:

1. A body pillow having **a top which is essentially in the shape of a horseshoe<sup>[1]</sup>** for accommodating an upper end of a person and **a bottom which is essentially in the shape of a J<sup>[2]</sup>** for accommodating a lower end of the person, **a substantially cylindrical straight portion<sup>[3]</sup>** connecting **the horseshoe-shaped top<sup>[1]</sup>** with **the J-shaped bottom<sup>[2]</sup>**, **the cross-sectional diameter of the body pillow<sup>[7]</sup>** being between 7 and 12 inches, the horseshoe shaped top constituting<sup>[8]</sup> **a semi-toroidal member<sup>[4]</sup>** **having a diameter of about 25 to 26 inches<sup>[5]</sup>** and **terminating in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening<sup>[6]</sup>**.

See '164 Patent, 6:8-17. Each term of Claim 1 disputed by the parties is designated by [ \_ ] and numbered in the manner as designated by the parties.

## II. Legal Standards

### A. Claim Construction

The claims of a patent define, in technical terms, the scope of protection conferred by the patent, i.e., the claims define the patentee's invention to which the patentee is entitled the right to exclude. See *Markman*, 517 U.S. at 373 (“[A] patent must describe the exact scope of an invention and its manufacture to secure to the patentee all to which

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Order without distinguishing actions taken by the patent attorney or Ms. Leach as the owner of the '164 Patent.

<sup>3</sup> See *Markman v. Westview Instrs., Inc.* 517 U.S. 370, 373 (1996).

he is entitled, and to apprise the public of what is still open to them.” (internal quotations, alterations and citation omitted)); *Innova / Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004) (“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.”).

Claim construction is a question of law for the court. *Markman*, 517 U.S. at 384. The court need only construe claims that are “in controversy” and only “to the extent necessary to resolve the controversy.” *Vivid Techs, Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). “A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute” – for example, when the scope of what is covered by the term remains in dispute notwithstanding the ordinary meaning of the term. *O<sub>2</sub> Micro Int’l, Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008). Ultimately, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Reinshaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

## **B. Sources for Construing Claims**

A court considers three primary sources, referred to as “intrinsic evidence,” and often this evidence alone resolves any ambiguity as to a disputed claim term: (1) the language of the claims; (2) the specification (or written description); and (3) the prosecution history. *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir.

1996). When intrinsic evidence is insufficient to enable the court to determine the meaning of disputed claims, a court may also consider extrinsic evidence. *Id.* at 1584. “Extrinsic evidence is that evidence which is external to the patent and file history, such as expert testimony, inventor testimony, dictionaries, and technical treatises and articles.” *Id.*

## **1. Intrinsic Evidence**

### **a. Claim Language**

Claim terms are usually given their ordinary and customary meaning – “the meaning that the term would have to a person of ordinary skill in the art [POSITA] at the time of the invention, i.e., as of the effective filing date of the patent.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). This “objective baseline” is the starting point for claim construction. *Id.* at 1313. A POSITA reads the claim term in the context of the particular claim in which the disputed term appears, but also in the context of the patent as a whole including the patent specification and the prosecution history. *Id.*<sup>4</sup>

### **b. The Specification**

Next, the court looks at a patent’s specification as “[c]laims must be read in view of the specification, of which they are a part. *Markman v. Westview Instrs., Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff’d* 517 U.S. 370. “Usually, [the specification] is the single best guide to the meaning of a disputed term.” *Howmedica Osteonics Corp. v. Zimmer, Inc.*, 822 F.3d 1312, 1321 (Fed. Cir. 2016) (quotation marks and citation omitted).

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<sup>4</sup> As Plaintiffs state, “neither party has yet put forth a definition of the POSITA to this Court . . .” Pls.’ Resp. at 9.

But “there is a fine line between reading a claim in light of the written description and reading a limitation into the claim from the written description.” *Id.* (citation omitted). If a patentee selects a meaning distinct from that which the claim terms would otherwise have to a POSITA, the different meaning must be set forth in the specification in a manner sufficient to give one of ordinary skill notice of the change from the usual meaning. *Innova / Pure Water, Inc.*, 381 F.3d at 1117.

**c. Prosecution History**

Third, the court may consider the prosecution history, if, as here, it is in evidence. *Phillips*, 415 F.3d at 1317. A patent’s prosecution history contains a complete record of all the proceedings before the United States Patent and Trademark Office (PTO), including any express representations made by the applicant regarding the scope of the claims. Therefore, the prosecution history provides evidence of how the PTO and the inventor understood the patent, and the record before the PTO can be of critical significance in determining the meaning of the claims. *Id.* (“Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent.”) (citations omitted); *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a claim is to “exclude any interpretation that was disclaimed during prosecution.” (internal quotation marks and citation omitted)); *see also Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995) (citations omitted) (“The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution.

Claims may not be construed one way in order to obtain their allowance and in a different way against accused infringers.” (citations omitted)).

## **2. Extrinsic Evidence**

Generally, courts view extrinsic evidence as “less reliable” than intrinsic evidence. *Cont’l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 799 (Fed. Cir. 2019). “[E]xtrinsic evidence in general, and expert testimony in particular, may be used only to help the court come to the proper understanding of the claims; it may not be used to vary or contradict the claim language.” *Vitronics*, 90 F.3d at 1584. As noted, the parties agree that no expert testimony is needed for claim construction in this case. Defendant, however, relies upon dictionary definitions to support certain of its proposed constructions. “Judges are free to . . . rely on dictionary definitions when construing claims, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents. *Id.*, n. 6.

## **III. Prosecution History**

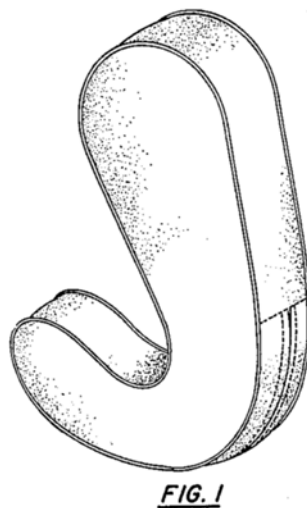
Both parties cite the prosecution history of the ‘164 Patent in support of their respective claim constructions. Thus, the Court considers the prosecution history in construing the disputed terms of Claim 1. *See* Prosecution History of the ‘164 Patent (PH) [Doc. No. 76-4]. Claim 1 in the originally filed patent application read as follows:

A body pillow having an upper end which is essentially in the shape of a horseshoe and a lower end which is essentially in the shape of a J, a straight portion connecting the horseshoe-shaped top with the J-shaped bottom, the cross-sectional diameter of the body pillow being between 7 and 12 inches.

PH at Leachco 436.<sup>5</sup>

### A. The PTO's First Rejection

Upon review, the PTO rejected Claim 1 finding it was unpatentable over a previously issued patent to Jacobson. PH at Leachco 453; *see also* Pls.' Brf., Ex. 6 (Jacobson Patent). The PTO found that "Jacobson discloses a pillow having a horseshoe-shaped upper end connected to a J-shaped lower end by a straight portion . . . ." *Id.* The PTO further found that "Jacobson discloses the claimed invention except for the cross-sectional diameter between 7-12 inches and the straight portions having lengths between 48-56 inches and 24-32 inches." *Id.* The PTO deemed these dimensions represented modifications involving "a mere change in size of a component" generally recognized "as being within the level of ordinary skill in the art." *Id.*



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<sup>5</sup> Although the prosecution history shows other claims were rejected, the parties' dispute centers on the terms of Claim 1. Therefore, the Court limits recitation of the prosecution history to the PTO's actions and Plaintiffs' responses in relation to Claim 1.

## 1. Plaintiffs' First Response

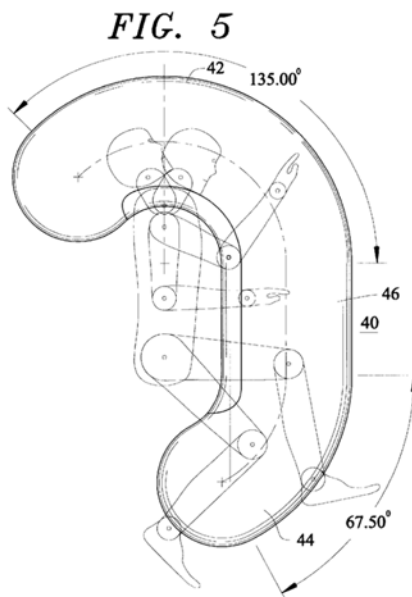
Plaintiffs then filed an amendment. The language Plaintiffs added to Amended Claim 1 is denoted by underlining . . . . and the language Plaintiffs deleted is denoted by bracketing [ . . . ]. Amended Claim 1 provided as follows:

A body pillow having [an upper end] a top which is essentially in the shape of a horseshoe for accommodating an upper end of a person and a [lower end] bottom which is essentially in the shape of a J for accommodating a lower end of the person, a substantially cylindrical straight portion connecting the horseshoe-shaped top with the J-shaped bottom, the cross-sectional diameter of the body pillow being between 7 and 12 inches, the horseshoe shaped top constituting a semi-toroidal member having a diameter of about 25 to 26 inches and terminating in a foot spaced from the straight portion and forming therewith a curved opening.

PH, Leachco at 464.

## B. The PTO's Second Rejection

The PTO rejected Amended Claim 1 for being unpatentable over the Shaffner patent. *See* PH, Leachco at 468; *see also* Pls.' Brf., Ex. 8 (Shaffner Patent).

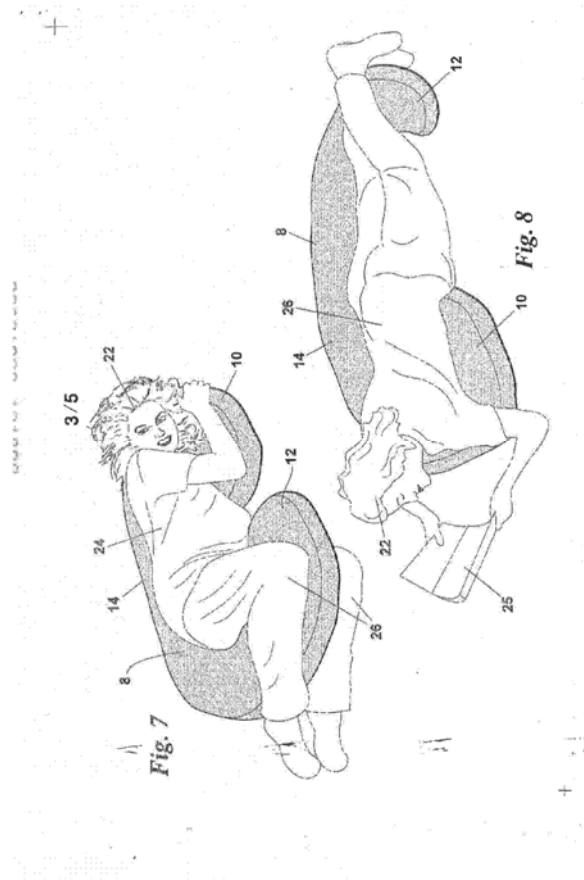




The PTO did not, however, address the additional limitations that Plaintiffs added in the first response. Accordingly, Plaintiffs filed a request for reconsideration of Amended Claim 1. *See id.* at Leachco 474-475 (noting that “the Examiner has neglected to comment on the last three lines of Claim 1, to wit ‘the horseshoe-shaped top constituting a semi-toroidal member having a diameter of about 25 to 26 inches and terminating in a foot spaced from the straight portion and forming therewith a curved opening.’”).

### **1. Plaintiffs’ Second Response**

In requesting a reconsideration, Plaintiffs argued that the term “semi-toroidal” which would “connote a shape resembling roughly one half of a doughnut” is “not apparent in the drawing of Shaffner” and “particularly regarding Figure 5.” *Id.* at Leachco 475. But “more importantly,” Plaintiffs argued, amended Claim 1 describes the semi-toroidal member “in terms of ‘terminating in a foot spaced from the straight portion and forming therewith a curved opening’” and Shaffner “clearly” does not show “a foot spaced from the straight portion and forming therewith a curved opening.” *Id.* Plaintiffs also argued that the described “foot” “has a function and purpose” which “prevents [the lady shown in Figure 7] from slipping off the pillow” thus further distinguishing Shaffner. *Id.*



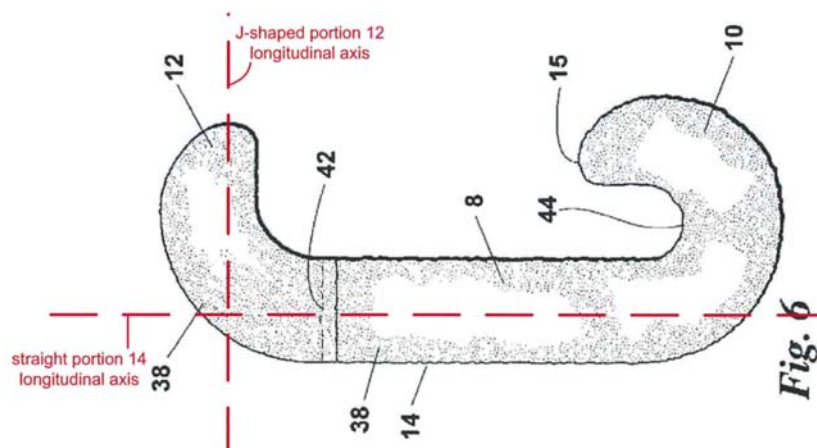
'164 PATENT  
FIGURES 7 and 8

### C. The PTO's Third Rejection

The PTO then examined Amended Claim 1 and considered the additional limitations it had failed to previously consider. But the PTO found the Shaffner patent did, in fact, have a semi-toroidal member. *Id.* at Leachco 481 (“[T]oroidal is defined as doughnut-shaped and semi has a definition of partial or incomplete. Therefore, Shaffner clearly has a top constituting a semi-toroidal member defined by a partial / incomplete doughnut portion.”). The PTO also found the limitation of “a cross-sectional diameter between 25-26 inches and terminating in a foot spaced from the straight portion” was an “obvious matter of design choice” and, therefore, not patentable over Shaffner. *Id.*

## 1. Plaintiffs' Third Response

Plaintiffs then filed a second amendment and added another limitation to Claim 1, the relevant portion of which provides as follows: “the horseshoe-shaped top constituting a semi-toroidal member having a diameter of about 25 to 26 inches and terminating in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening.” *Id.* at Leachco 486. The specification was amended “to further describe Figure 6 in terms of the foot extending parallel to the straight section 14 and forming therewith a curved opening 44.” *Id.*; *see also* ‘164 Patent 5:28-30. Defendants have provided an annotated version of the referenced Figure 6 as follows:



Def.'s Brf. at 16. Plaintiffs again reiterated that the purpose of the foot extending parallel limitation was to prevent the lady shown in Figure 7 from slipping off the pillow. *See* PH at Leachco 71.

### D. The PTO's Notice of Allowance

In response to Plaintiffs' second amendment, the PTO issued its notice of Allowable Subject Matter. The PTO stated: “Claims 1-11 are allowed.” *See* PH at Leachco 491. The PTO further stated:

The prior art of record does not teach nor does any combination thereof fairly suggest a body pillow having a top in the shape of a horseshoe defining a spaced semi-toroidal member extending parallel from a cylindrical straight portion that connects the top of the pillow to a J-shaped bottom. It would not have been obvious to a person of ordinary skill in the art given the prior art of record to provide the above structure.

*See id.*

#### **IV. Discussion**

Initially, Defendant argues for the addition of the phrase “a pillow form” as to the construction of terms 1 through 6 of Claim 1. Conversely, Plaintiffs argue for the addition of the phrase “a pillow element” as to the construction of terms 1 through 4 and 6 of Claim 1. The Court addresses those arguments first and then addresses each disputed term of Claim 1 in turn.

##### **A. “Pillow Form” / “Pillow Element”**

Defendant argues that inclusion of the phrase “pillow form” is needed to “distinguish between a pillow’s intended shape, its manufactured shape or the ‘pillow form,’ as opposed to all the various other shapes that a user might twist or contort the pillow form into when using the pillow in accordance with its intended purpose.” Def.’s Brf. at 18. Defendant points to its annotated version of Figure 6, *see supra*, which it contends depicts a “three dimensional ‘pillow form.’” *Id.* Defendant further contends that construing the claim to require a pillow form “can resolve ambiguities by clearly defining the constructions to mean the various intentional shapes of the manufactured pillow, not the various shapes that can be achieved by using the manufactured pillow form in accordance with the pillow’s intended use.” *Id.* at 21.

In further support of its proposed construction and as part of its tutorial at the *Markman* hearing, Defendant argues the language of Claim 1 does not address repositioning of the pillow and, therefore, Claim 1 is limited to “one fixed form.” Defendant compares Claim 1 to another of Plaintiffs’ patents that recites “many forms” to emphasize the ‘164 Patent covers only one form or shape. *See* Technology Tutorial at 30 (citing Leach Patent US 6, 751, 817).<sup>6</sup>

Defendant also points to the prosecution history as evidence that the PTO treated Claim 1 as being limited to one form. Defendant relies upon the amendments – and specifically the “extending parallel to the straight portion” language of those amendments. *See* discussion, *supra*. Defendant contends the amendments demonstrate Plaintiffs disclaimed the scope of Claim 1 and narrowed the claim to one form (or shape), i.e., a “static shape” and not all forms into which the body pillow can be twisted or contorted.<sup>7</sup>

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<sup>6</sup> This patent includes the following claim:

1. A contoured body pillow having a substantially candy cane shape, *which shape is malleable and may be altered to form a plurality of different shapes conforming to the desires of the user*, comprising a first terminal end having a semi-bell shape which tapers upward and convergingly inward at an opposite non-terminal end the semi-bell shaped member having a substantially straight outer edge and a substantially curved inner edge, the semi-bell shape member transitioning at the non-terminal end into a U-shaped portion, a downwardly-extending leg connecting to the U-shaped portion, the downwardly extending leg having an initially narrow construction gradually widening and the leg expanding at its lowermost portion to form a bell shape, the bell shape terminating at a second terminal end in a beveled edge.

*Id.*

<sup>7</sup> The specification uses the word “form” only twice and not in the manner or context advocated by Defendant. *See* Pls.’ Resp. at 18-19 (citing ‘164 Patent at 1:8-13 and 5:5-12). The specification describes “blowing batting material, such as polyester fiber” into the inner member or liner of the

In response, Plaintiffs argue that both parties have agreed the term “body pillow” does not require construction and that Defendant’s proposed addition of the term “pillow form” does nothing to clarify the meaning of the actual claim language. Thus, Plaintiffs oppose Defendant’s attempt to “add the phrase ‘pillow form’ into the construction of nearly every disputed claim element.” Pls.’ Resp. at 10. Plaintiffs contend Defendant fails to identify any intrinsic or extrinsic evidence which would support adding “pillow form” to the claim construction. Plaintiffs further argue Defendant’s proposed construction would “invade the province of the jury on the issue of infringement by urging the Court to determine whether certain ‘manufactured shapes’ are legally outside the scope of the claim.” Pls.’ Resp. at 12.

Plaintiffs instead request the Court to construe Claim 1 to include the phrase “pillow element.” Plaintiffs argue:

Unlike ‘pillow form,’ the phrase ‘pillow element’ is well supported by the claim language and specification. ‘Element’ would readily be understood by a POSITA to simply mean a ‘part.’ Claim 1 clearly requires ‘parts’ of a body pillow (i.e., top, bottom, straight portion).

Pls.’ Resp. at 13, n. 2. Like Defendant, however, Plaintiffs fail to point to any intrinsic evidence supporting the addition of the phrase “pillow element” to Claim 1. Instead, Plaintiffs merely state in wholly conclusory fashion that a POSITA would understand “element” to mean “part.” Pls.’ Resp. at 13, n. 2.

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body pillow “until the desired degree of fullness and firmness is achieved.” 3:19-32; *see also* 3:45-60.

The parties agree that Claim 1 describes a body pillow with three “parts”: (1) a horseshoe-shaped top; (2) a J-shaped bottom; and (3) a substantially cylindrical straight portion connecting the horseshoe-shaped top with the J-shaped bottom. The Court notes that these parts are not created separately and then sewn together to make the body pillow. And, as set forth, the parties have not requested construction of the term “body pillow.”

The Court rejects both parties’ requests to add additional language to Claim 1. *See K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) (“Courts do not rewrite claims; instead we give effect to the terms chosen by the patentee); *Autogior Co. of Am. v. United States*, 384 F.2d 391, 396 (Ct. Cl. 1967) (“Courts can neither broaden nor narrow claims to give the patentee something different than what he has set forth.”). The additional phrases “pillow form” or “pillow element” do not clarify the meaning of the disputed claim terms. *See Tex. Dig. Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1201 (Fed. Cir. 2002) (addressing “heavy presumption” that the terms used in claims “mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art”).

The Court further notes as to Defendant’s proposed addition to Claim 1, the phrase “pillow form” suggests a structural rigidity not included in the claim language. The embodiments clearly demonstrate the intended flexibility of the body pillow, i.e., that the pillow can be adjusted into different positions to accommodate the user. *See* discussion, *supra*, regarding the J-shaped bottom. Thus, the Court declines to adopt Defendant’s proposed construction because it could limit Claim 1 in ways not supported by the claims or the specification.

Because, as discussed next, the Court deems the additional elements of Claim 1 should be included in the definition of a “horseshoe-shaped top,” Defendant will be able to demonstrate to the jury that there exists an “intended manufactured shape” for the ‘164 Patent. But the Court declines to find, as a matter of law, that either “pillow form” or “pillow element” should be added to the language of Claim 1.

## B. Disputed Claim Terms

### 1. *“a top which is essentially in the shape of a horseshoe . . . the horseshoe-shaped top”*

No.	Claim Terms	Plaintiffs’ Proposed Construction	Defendant’s Proposed Construction	Court’s Construction
1.	<p>“a top which is essentially in the shape of a horseshoe”</p> <p>-and-</p> <p>“the horseshoe-shaped top</p>	a U-shaped pillow element similar to the shape of a horseshoe at one end of a body pillow	<p>A pillow form requiring: a semi-toroidal member (term #4)</p> <p>having a diameter of about 25 to 26 inches (term #5)</p> <p>terminating in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening (term #6)</p>	<p>A top which is essentially in the shape of a horseshoe requiring: a semi-toroidal member (term #4)</p> <p>having a diameter of about 25 to 26 inches (term #5)</p> <p>terminating in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening (term #6)</p>

Although the Court rejects Defendant’s inclusion of the phrase “pillow form” in the construction of “a top which is essentially in the shape of a horseshoe” and the “horse-shoe



shaped top,” the Court otherwise substantially adopts Defendant’s proposed construction of the horseshoe-shaped top limitation and rejects Plaintiffs’ proposed construction.

Plaintiffs argue the horseshoe-shaped top “is unmistakably shaped like the letter ‘u’ or ‘u-shaped.’” Pls.’ Brf. at 13. Plaintiffs point to prior art (the Mathews patent, Pls.’ Brf., Ex. 5) as intrinsic evidence in support of their proposed construction. *Id.* at 14. But Plaintiffs ignore the prosecution history which demonstrates additional limitations further defining the horseshoe-shaped top. In this respect, the following statement by Plaintiffs is noteworthy: “[T]he prosecution history shows that Applicant did not change the meaning of horseshoe-shaped top, but rather, added separate claim limitations that each subsequently limit the type of horseshoe-shaped top claimed.” *Id.* Indeed, Plaintiffs appear to concede their position is unsupported. *See id.* at 14-15 (“In the end, *this separation will not matter to the ultimate infringement analysis* because a finding of infringement requires that each and every element (or limitation) set forth in the claim as a whole must be found in the accused product.”) (emphasis added).<sup>8</sup>

The Court agrees with Defendants that the “horseshoe-shaped top” must be construed to include the additional claim limitations defining it. The Court bases its decision on the prosecution history. “The purpose of consulting the prosecution history in construing a claim is to ‘exclude any interpretation that was disclaimed during prosecution.’” *Chimie*, 402 F.3d at 1384 (quoting *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1580 (Fed. Cir. 1988)).

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<sup>8</sup> Moreover, Plaintiff’s proposed “u-shaped” construction adds nothing to the meaning of the horseshoe-shaped top.

As set forth above, Plaintiffs’ amendments to Claim 1 of the Patent were made based on rejections of the body pillow in light of the Jacobson and Shaffner prior art. Plaintiffs distinguished the body pillow by adding limitations. Thus, the Court adopts Defendant’s proposed construction which stays true to the claim language.

**2. “a bottom which is essentially in the shape of a J” – and – “the J-shaped bottom”**

<b>No.</b>	<b>Claim Term</b>	<b>Plaintiffs’ Proposed Construction</b>	<b>Defendant’s Proposed Construction</b>	<b>Court’s Construction</b>
2.	<p>“a bottom which is essentially in the shape of a J”</p> <p>– and –</p> <p>“the J-shaped bottom”</p>	a J-shaped pillow element at one end of a body pillow	a pillow form requiring being connected away from the straight portion defining a larger curved opening (or larger curvature) than the horseshoe-shaped top’s curved opening.	a J-shaped bottom having a larger curvature than the center portion of the horseshoe-shaped top

Plaintiffs argue the specification clearly shows that the lower end of the body pillow is J-shaped and that “[p]ersons of ordinary skill in the art of the ‘164 patent commonly refer to pillow shapes in terms of letters of the alphabet.” Pls.’ Brf. at 21. Plaintiffs further argue that “[t]here is no language in the specification that clearly set[s] forth the definition of a ‘J-shaped bottom’ to unambiguously express an intent by Mrs. Leach to define ‘J-shaped’ bottom as anything other than its plain and ordinary meaning.” Pls.’ Resp. at 29.

Defendant argues the letter J “conceivably encompasses a large degree of variation” and, therefore, the Court must look to the function of the J-shaped end as recited in the specification, i.e., to accommodate a lower end of the person. Def.’s Brf. at 32. In this

regard, Defendant argues the J-shaped bottom “is a term of degree functioning to accommodate different portions of the user’s legs from her ankles to her thighs . . . .” *Id.* at 33; *see also* Def.’s Resp. at 23 (“[T]he J-shaped bottom is repositionable to accommodate different portions of the user’s lower end from her thighs (FIG. 7) to her ankles (FIG. 8).”).

The specification provides that “the J-shaped portion is wider in the horizontal direction than the height.” 5:19-21. Additionally, the specification states that the “center portion of the horseshoe-shaped portion” has an opening that is “fairly small and tight *as contrasted with the larger opening or curvature where the straight section curves into the J-shaped portion.*” *Id.*, 25-29 (emphasis added).

The Court finds the proper construction of this claim term is “a J-shaped bottom having a larger curvature than the center portion of the horseshoe-shaped top.” Such a construction stays true to the plain language of Claim 1 while addressing the repositioning component of the body pillow. The specification makes clear that the J-shaped bottom has a larger opening or curvature than the horseshoe-shaped top.

### 3. “a substantially cylindrical straight portion”

No.	Claim Terms	Plaintiffs’ Proposed Construction	Defendant’s Proposed Construction	Court’s Construction
3.	“a substantially cylindrical straight portion”	a pillow element that is straight and has nearly a circular cross-section	a pillow form requiring a straight and nearly circular cross-section	a straight and nearly circular cross-section

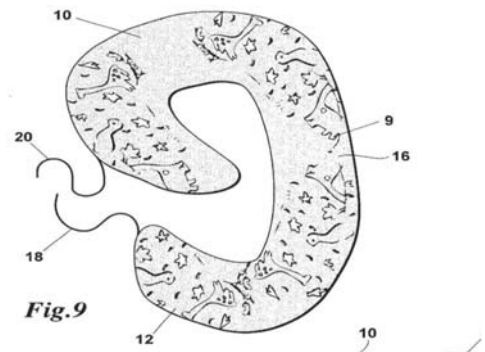
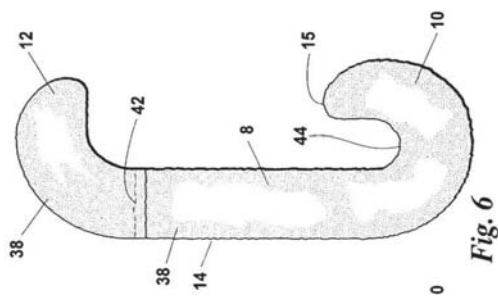
The parties' only dispute is whether "pillow element" or "pillow form" should be used. For the reasons set forth above, the Court finds neither phrase is appropriate but rather superfluous. The Court, therefore, adopts the undisputed portion of the parties' proposed constructions and finds "a substantially cylindrical straight portion" means "a straight and nearly circular cross-section."

**4.      *"a semi-toroidal member"***

<b>No.</b>	<b>Claim Term</b>	<b>Plaintiffs' Proposed Construction</b>	<b>Defendant's Proposed Construction</b>	<b>Court's Construction</b>
4.	"a semi-toroidal member"	a pillow element that is a portion of [the horse-shoe shaped top] roughly resembling one-half of a doughnut shape	a pillow form requiring a half-doughnut shape, meaning half of a ring-shape having concentric inner and outer semi-circular arcs	a portion of the horseshoe-shaped top resembling one-half of a doughnut shape

The parties do not dispute that the "semi-toroidal" limitation was defined during prosecution to mean "half-doughnut shape." Defendant argues its proposed construction is necessary to "cur[e] the foreseeable deficiency that doughnuts come in different shapes and sizes" and that "both the PTO and the Plaintiff[s] meant the ordinary, round, type of doughnut with a hole in the middle." Def.'s Brf. at 24.

To support its argument, Defendant compares Figure 6 which it argues "clearly depicts the semi-toroidal member limitation of claim 1" with Figure 9 which Defendant argues does not establish the semi-toroidal limitation "because it establishes the top of the curved opening with a straight-line segment instead of a semi-circular arc." Def.'s Resp. at 12-13. Figures 6 and 9 are set forth below:



Plaintiffs contend Defendant’s addition of the phrase “meaning half of a ring-shape having concentric inner and outer semi-circular arcs” would confuse, not clarify the meaning of Claim 1 and that a POSITA would not interpret this language in Claim 1 as requiring any “mathematical certainty.” Pls.’ Brf. at 31.

Having considered the parties’ arguments, the Court finds Plaintiffs’ construction is proper and rejects Defendant’s construction as it would add a precision requirement not present in the ‘164 Patent or its specification and contrary to the manner in which a POSITA would interpret this claim language. Essentially Defendant asks the Court to read a requirement into the ‘164 Patent based upon the preferred embodiments which the Court will not do. *See Phillips*, 415 F.3d at 1322 (discussing danger of reading limitations from the specification into the claim and explaining that “[i]t may become clear upon reading the specification in light of [the purposes of the specification to teach how to make and use the invention] whether the patentee is setting out specific examples of the invention . . . or intends for the claims and embodiments in the specification to be strictly coextensive.”).

**5.      “having a diameter of about 26 to 26 inches”**

<b>No.</b>	<b>Claim Term</b>	<b>Plaintiffs’ Proposed Construction</b>	<b>Defendant’s Proposed Construction</b>	<b>Court’s Construction</b>
5.	<p><b>PLAINTIFFS:</b> “[a semi-toroidal member] having a diameter of about 25 to 26 inches”</p> <p><b>DEFENDANT:</b> “[the horseshoe-shaped top constituting a semi-toroidal member] having a diameter of about 25 to 26 inches”</p>	[a semi toroidal member] having a diameter measured between the outside edges of the one half doughnut shape at its widest point, which diameter is in the range of approximately 25 to approximately 26 inches	<p>a pillow form requiring a semi-toroidal diameter in the range of 25.0 to 26.0 inches.</p> <p>Alternative:</p> <p>a pillow form requiring a semi-toroidal diameter of 25 to 26 inches within zero decimal place rounding, meaning within a range of 24.51 inches to 26.49 inches</p>	[a semi-toroidal member] having a diameter measured between the outside edges of the one-half doughnut shape at its widest point, which diameter is in the range of approximately 25 to 26 inches

With respect to this term, Plaintiffs state, “the parties could not even agree as to the claim term that needs to be defined, let alone what the resulting definition should be” but that “at the end of the analysis both parties really only seek the construction in the context of Claim 1 of ‘having a diameter of about 25 to 26 inches.’” Pls.’ Brf. at 32. The Court agrees and admonishes the parties for the added confusion the manner of their presentation of the issue presents.

Plaintiffs argue the diameter at issue is that of the semi-toroidal member of the horseshoe-shaped top. Plaintiff proposes that the diameter should be measured “between the outside edges of the one half doughnut shape at its widest point.” Pls.’ Brf. at 35.

Defendant argues because “[t]here is no justification for the function of [the] diameter [of the semi-toroidal member of the horseshoe-shaped top], there is justification to strictly construe this term to mean ‘25.0 to 26.0 inches.’” Def.’s Brf. at 30. Defendant cites no authority in support or explain why a strict construction is warranted. Instead, Defendant then points to the prosecution history and the PTO’s interpretation of “about 25 to 26 inches” as meaning “between 25-26 inches.” *Id.* at 31; *see also* PH at 65. Defendant argues that Plaintiffs did not traverse the rejection and challenge the PTO’s interpretation and, therefore, disclaimed any interpretation other than the PTO’s. *Id.* But as Plaintiffs demonstrate, in a telephone interview with the PTO reference was made to the “about 25 to 26 inches,” *see* PH at 71, and no other evidence exists to demonstrate a clear disavowal of scope during the prosecution history.

Defendant impermissibly attempts to read out of Claim 1 the word “about” 25 to 26 inches and replace it with the word “between.” The Court finds neither the specification nor the prosecution history supports Defendant’s proposed construction. *See, e.g., Cohesive Tech., Inc. v. Waters Corp.*, 543 F.3d 1351, 1370 (Fed. Cir. 2008) (“The claim term ‘about’ cannot be eliminated by the prosecution history, unless [the patentee] made a clear and unmistakable disavowal of scope during prosecution.” (internal quotation marks and citation omitted)). Moreover, contrary to Defendant’s proposed construction, use of the term “about” “avoids a strict numerical boundary to the specified parameter.” *Central Admixture Pharm. Servs., Inc. v. Advanced Cardiac Solutions, P.C.*, 482 F.3d 1347, 1355 (Fed. Cir. 2007) (internal quotation marks and citation omitted). Finally, Defendant does not contest Plaintiffs’ argument that measurement of the diameter should be made

“between the outside edges of the one half doughnut shape at its widest point.” Thus the Court adopts Plaintiffs’ proposed construction.

**6. *terminating in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening***

No.	Claim Term	Plaintiffs’ Proposed Construction	Defendant’s Proposed Construction	Court’s Construction
6.	<p><b>PLAINTIFFS:</b>  “[the horseshoe-shaped top constituting a semi-toroidal member] . . . and terminating in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening”</p> <p><b>DEFENDANT:</b>  [the horseshoe-shaped top constituting a semi-toroidal member] . . . terminating in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening</p>	<p>[the horseshoe-shaped top constituting a semi-toroidal member] . . . and terminating in an end piece that lies apart but parallel to the substantially cylindrical straight portion of a body pillow creating a curved opening defined by the substantially cylindrical straight portion, the pillow element roughly resembling one-half of a doughnut shape, and the end piece extending from the pillow element roughly resembling one-half of a doughnut shape</p>	<p>A pillow form requiring:</p> <p>a). the semi-toroidal member terminating in a foot spaced from the straight portion and extending from the semi-toroidal member parallel to, meaning equidistantly from, the straight portion; and</p> <p>b). the semi-toroidal member and the foot defining a curved opening with the straight portion that is fairly small and tight as contrasted with the J-shaped end’s curved opening (or curvature).</p>	<p>The semi-toroidal member:</p> <p>a). terminating in a foot spaced from the straight portion and extending from the semi-toroidal member parallel to the straight portion and</p> <p>b). the semi-toroidal member and the foot defining a curved opening with the straight portion that is fairly small and tight as contrasted with the J-shaped bottom’s curved opening (or curvature).</p>

The parties again fail to agree upon the claim term to be construed. The parties address the limitations within disputed term 6 separately as follows.



a. *“terminating in a foot” limitation*

The initial point of contention is whether the “terminating in a foot” limitation refers to “the horseshoe-shaped top” or “a semi toroidal member.” Plaintiffs argue the limitation modifies the “horseshoe-shaped top” limitation. Plaintiffs contend this construction is required due to use of the word “and” as follows: “the horseshoe-shaped top **constituting** a semi-toroidal member having a diameter of about 25 to 26 inches **and terminating** in a foot spaced from the straight portion extending parallel to the straight portion and forming therewith a curved opening.” Pls.’ Brf. at 36 (citing ‘164 Patent, 6:13-17).

Defendant, conversely, argues the limitation modifies a semi-toroidal member. Defendant points to the prosecution history. According to Defendant, when explaining the first amendment to the Examiner, Plaintiffs placed quotation marks “around everything that the horseshoe-shaped top constitutes” as follows:

Claim 1 has been further amended to indicate . . . the horseshoe-shaped top is further defined as constituting “a semi-toroidal member having a diameter of about 25 to 26 inches and terminating in a foot spaced from the straight portion and forming therewith a curved opening” . . . .

Def.’s Brf. at 26 (citing PH at Leachco 460). Defendant argues had Plaintiffs intended to modify something other than a semi-toroidal member, “Plaintiffs would have placed the ending quotation marks after the *inches* term instead of after the *opening* term in its explanation of its first amendment.” *Id.*

Plaintiffs point to additional language in the prosecution history – a second statement by Plaintiffs that follows the statement cited by Defendant and provides:

Claim 1 has now been amended to recite that the horseshoe-shaped top constitutes “a semi-toroidal member having a diameter of about 25 to 26

inches and terminating in a foot spaced from the straight portion and forming therewith a curved opening.” The **foregoing definition of the horseshoe-shaped portion** clearly defines the present invention over any possible interpretation of Jacobson.

Pls.’ Resp. at 25 (citing PH, Leachco at 461). Although the quotation marks remain in the same position, Plaintiffs rely on the sentence which follows the quotations, as bolded and underlined above.

The Court agrees with Defendant’s construction. The prosecution history reflects that the “terminating in a foot limitation” modifies the “a semi-toroidal member” limitation. The prosecution history clarifies the otherwise ambiguous claim language.

**b.     *extending parallel to the straight portion limitation***

The parties further dispute the meaning of the limitation “extending parallel to the straight portion.” As discussed above, this was a second-added limitation made during the prosecution of the ‘164 Patent.

Plaintiffs would have the Court substitute the word “extending” as used in Claim 1 and replace it with the word “lies.” Also, Plaintiffs would have the Court substitute the word “foot” for the phrase “end piece.” Thus, Plaintiffs argue the limitation should be construed as follows:

[the horseshoe-shaped top constituting a semi-toroidal member] . . . and terminating in an end piece that lies apart but parallel to the substantially cylindrical straight portion of a body pillow

Pls.’ Brf. at 35.

Defendant argues this limitation should be construed as follows:

the semi-toroidal member terminating in a foot spaced from the straight portion and extending from the semi-toroidal member parallel to, meaning equidistantly from, the straight portion

Def.'s Brf. at 28. Defendant relies upon extrinsic evidence, and points to a dictionary definition of "parallel," in support of its proposed construction. *See id.* at 28 and Ex. 12. Defendant further relies upon intrinsic evidence and, specifically, Figure 6 of the '164 Patent to demonstrate that the foot "extends in a direction that remains equally distanced from, equidistantly to, the straight portion." *Id.*; *see also id.* at 27 (annotated version of Figure 6).

Plaintiffs argue that Defendant impermissibly tries to narrow the claim through reliance upon extrinsic evidence. Fundamentally, Plaintiffs contend the Defendant's proposed construction is "too mathematically rigorous for the context of the '164 Patent, especially for a POSITA working with sewn soft goods." Pls.' Resp. at 22.

Plaintiffs point to the claim language which does not recite that the foot "is parallel" nor does it recite that "***the inner edge of the foot*** be parallel to the ***inner edge of the straight portion***" as Defendant's construction would require. Pls.' Resp. at 22. Instead, Plaintiffs argue that the claim language requires only that the foot "extend[] parallel to the straight portion." *Id.*

Having reviewed the parties' arguments, the Court finds the "extending parallel to the straight portion" limitation should be construed as follows: "the semi-toroidal member terminating in a foot spaced from the straight portion and extending from the semi-toroidal

member parallel to the straight portion.” Plaintiff’s construction is rejected because it attempts to incorporate multiple additional undefined terms: “end piece,” “pillow element” and “lies apart.” And, Defendant’s additional claim language, “parallel to, meaning equidistantly from,” narrows the claim in a manner inconsistent with the specification.

**c. “*curved opening*”**

Finally, the parties dispute how the “curved opening” limitation should be construed. Both parties point to the prosecution history which addresses the second amendment over prior art and the intended purpose served by the curved opening.

In distinguishing the Shaffner prior art, Plaintiffs argued that Shaffner Figure 5 did not disclose a foot, and in particular, a “foot spaced from the straight portion and forming therewith a curved opening.” *See* PH, Leachco at 475. Plaintiffs further argued the second amendment was not “a mere change in dimensions” but would prevent the lady depicted in FIGS. 7 and 8 from “slipping off the pillow.” *See* PH at Leachco 487 (“It is again respectfully submitted that if the lady in these figures, particularly Figure 7, were to attempt to employ the pillow of Shaffner, Figure 5, she would slide off the pillow; however, the foot which extends further downwardly from that shown in Figure 5 of Shaffner, and which extends in spaced parallel relation with the straight portion 14 to form a curved opening 44, prevents the lady from slipping off the pillow.”).

Defendant argues this prosecution history shows Plaintiffs disclaimed any interpretation of the curved opening other than what is formed when the foot extends parallel to the straight portion. Thus, Defendant proposes the curved opening limitation be construed as follows:

the semi-toroidal member and the foot **defining a curved opening with the straight portion that is fairly small and tight as contrasted with the J-shaped end's curved opening (or curvature)**

Def.'s Brf. at 29. Defendant seeks to insert the language from the specification that describes the "center portion of the horseshoe-shaped portion" as having an opening that is "fairly small and tight" as contrasted to the "larger opening or curvature where the straight section 14 curves into the J-shaped portion 12." *See* "164 Patent 5: 24-28.

Plaintiffs challenge Defendant's construction pointing to settled law that claims must be read in light of the specification, but limitations from the specification may not be read into the claims. *See Phillips*, 415 F.3d at 1323; *Comark Commc'ns. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998). Defendant counters that this settled law is "in perfect harmony" with another well-settled principle of claim construction, i.e., that the specification is highly relevant in the claim construction analysis. Def.'s Resp. at 15 (citing *Howmedica*, 822 F.3d at 1321 (additional citations omitted)).

In *Howmedica*, the court relied on the written description to construe "relative location terms" where the plain and ordinary meaning of the terms were inadequate to resolve the parties' dispute and the meaning of the terms were not facially clear such that a skilled artisan would naturally look to the written description for a full understanding of the claims. *Id.* at 1321-22. The court reiterated the "fine line between reading claims *in light of* the written description, and importing limitations from the written description" but deemed it proper, under the circumstances of the case, to construe the unclear claim terms in light of the written description. *Id.* at 1322 (emphasis in original).

Having considered the parties' arguments, the Court finds the proper construction of the curved opening language must consider the prosecution history and specification with respect to the intended function of the horseshoe-shaped top, i.e., to accommodate an upper end of a person and prevent the person from falling off the pillow. Resort to the specification is necessary to determine how the horseshoe-shaped top does this. The specification demonstrates the comparatively smaller opening of the horseshoe-shaped top achieves this function. Thus, the Court concludes the claim construction proposed by Defendant is the proper construction.

**7. *“the cross-sectional diameter of the body pillow”***

<b>No.</b>	<b>Claim Term</b>	<b>Plaintiffs' Proposed Construction</b>	<b>Defendant's Proposed Construction</b>	<b>Court's Construction</b>
7.	“the cross-sectional diameter of the body pillow”	diameter at any point along the length of a body pillow when bisected by a plane perpendicular to the axis of the nearly cylindrical shape	indefinite	the diameter at any point along the length of a body pillow when bisected by a plane perpendicular to the axis of the nearly cylindrical shape

Defendant argues this claim term is indefinite because it lacks a proper antecedent basis not cured by the specification because it describes several different cross-sectional diameters. First, Defendant points to reference in the specification to the straight section of the body pillow as “nearly cylindrical.” *See* 5:12-14 (“With respect to the straight section 14, which as indicated heretofore, is nearly cylindrical; actually, the top of section 14 will be slightly closer to the bottom than the side to side dimension.”). Second, Defendant points to the “ends of the pillow”, i.e., the top and the bottom portions as having

“even more different cross sectional diameters.” Def.’s Brf. at 75 (citing 5:17-23) (“With the desired of [sic] degree of firmness for the pillow 8, the horseshoe-shaped portion 10 will be somewhat flatter, with the top portion thereof being separated from the bottom portion thereof less than in the section 14 . . . . The same considerations hold true for the J-shaped portion 12 . . . .”).

Plaintiffs conversely argue that the abstract, specification and prosecution history support their proposed construction and that a POSITA would understand the meaning of the term as proposed by Plaintiffs. The abstract provides as follows:

A body pillow having an upper end which is essentially in the shape of a horseshoe and a lower end which is essentially in the shape of a J, a straight portion connecting the horseshoe-shaped top with the J-shaped bottom, *the cross-sectional diameter of the body pillow being between 7 and 12 inches.*

*See* ‘641 Patent, Abstract (emphasis added). Plaintiffs also point to the following language in the Summary of the Invention:

A support pillow having a horseshoe-shaped top and a J-shaped bottom connected together by a straight section. *Preferably, the diameter of the straight section (this diameter applies to the horseshoe portion and the J-shaped portion as well) is preferably about 8 inches but can be between 6 and 12 inches.*

*See* ‘164 Patent, 2:5-11 (emphasis added). Plaintiffs further argue that with respect to the remainder of their proposed construction, a POSITA “would know that cylinders have circular cross-sections and that circles have diameters.” Pls.’ Brf. at 25.

Finally, Plaintiffs point to the prosecution history and argue, the Examiner rejected aspects of Claim 1 as indefinite but did not reject “cross-sectional diameter” as indefinite. Plaintiffs reference the PTO’s notes rejecting the claims as obvious over the Jacobson

design patent in view of the Kelly patent and stating that the cross-sectional diameter of 7-12 inches would have been “an obvious matter of design choice.” *Id.* at 26 (citing PH at Leachco 453). Plaintiffs claim this statement demonstrates the PTO understood “cross-sectional diameter” to be well within the common understanding of a POSITA. *Id.*

Both parties also point to the proposed constructions of the claim term “a substantially cylindrical straight portion” as being contradictory to the positions taken with respect to construction of the claim term “the cross sectional diameter.” Defendant argues Plaintiffs advocate for a “*nearly* circular cross section” for the “substantially cylindrical straight portion” limitation but then argue for that non-circular cross section to have “only one diameter where the skilled artisan knows it has at least a major and a minor diameter.” Def.’s Resp. at 24-25. And Plaintiffs argue that Defendant concedes a POSITA would understand the meaning of “substantially cylindrical straight portion” but then inconsistently argues that same POSITA would not understand the meaning of “cross-sectional diameter of the body pillow.” Pls.’ Resp. at 30.

A claim term is indefinite if it fails, “viewed in light of the specification and prosecution history, [to] inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). “An accused infringer must [ ] demonstrate by clear and convincing evidence” that a claim term is indefinite. *Haemonetics Corp. v. Baxter Healthcare Corp.*, 607 F.3d 776, 783 (Fed. Cir. 2010) (citing *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249-50 (Fed. Cir. 2008)). The key question is whether the intrinsic evidence provides “a general guideline and examples sufficient to enable a person of ordinary skill in the art to



determine [the scope of the claims].” *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1335 (Fed. Cir. 2010). “[T]he lack of an antecedent basis does not render a claim indefinite as long as the claim apprises one of ordinary skill in the art of its scope, and therefore, serves the notice function required by [35 U.S.C. § 112 ¶2].” *In re Downing*, 754 F. App’x 988, 996 (Fed. Cir. 2018) (internal quotation marks and citation omitted). “Thus, a claim term that lacks an antecedent basis may, but does not necessarily, render a claim indefinite.” *Id.*

The Court finds that Defendant has not presented clear and convincing evidence that a POSITA would not understand the meaning of the term “the cross-sectional diameter of the body pillow.” When read in context of the specification and prosecution history, the term “cross-sectional diameter of the body pillow” would sufficiently inform a POSITA of the scope of the invention. The Court, therefore, adopts Plaintiffs’ proposed construction.

## 8. Constituting

No.	Claim Term	Plaintiffs’ Proposed Construction	Defendant’s Proposed Construction	Court’s Construction
8.	“constituting”	including	establishing	establishing

Where a patent uses a transitional phrase or word, like constituting, the court must look to the specification to determine whether open or closed language is intended. *Lampi Corp. v. Am. Power Prods., Inc.*, 228 F.3d 1365, 1376 (Fed. Cir. 2000). Both parties point to the same intrinsic evidence, use of the phrase “actually constitutes” in the specification. *See id.*, 5:22-25. In full context, the sentence in which this phrase appears reads: “[t]he upper portion of the horseshoe-shaped portion *actually constitutes* a semi-toroidal member

having a diameter of about 25 to 26 inches. *Id.* (emphasis added). The specification continues with the following description:

With respect to the center portion of the horseshoe-shaped portion between the lower foot 15 thereof, the opening is fairly small and tight as contrasted with the larger opening or curvature where the straight section curves into the J-shaped portion. A [sic] best shown in Fig. 6, the foot 15 extends parallel to the straight portion 14 and forms therewith the curved opening 44.

*Id.*, 5:25-31.

Defendant argues the “upper portion” of the horse-shoe shaped top does not include the foot 15. Thus, to construe “constituting” to mean “including” would be overly broad and change the meaning of the specification.<sup>9</sup>

Plaintiffs argue, conversely, that the term “constituting” simply further defines the horse-shoe shaped top. Adopting Plaintiffs’ meaning of the word “constituting” as “including,” the horse-shoe shaped top has at least “a semi-toroidal member, a foot, a curved opening, and potentially more.” Pls.’ Brf. at 27.

The Court finds the language of the patent supports Defendant’s construction. The patent states that the upper portion of the horseshoe-shaped portion *actually constitutes* a semi-toroidal member. This language is not open-ended as Plaintiffs argue.


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<sup>9</sup> Defendant also cites to extrinsic evidence, i.e., the dictionary definition of “constituting”, as meaning “establishing. *See* Def.’s Brf., Ex. 16. But that same dictionary definition also indicates “constituting” means “composing”, a term synonymous with Plaintiffs’ advocated construction of “including.” *Id.*

**V. Conclusion**

For the reasons stated, the Court finds the disputed terms of Claim 1 of the '164 Patent should be construed as set forth herein. The parties are reminded to abide by the scheduling deadlines set forth in the Revised Agreed Scheduling Order [Doc. No. 135].

IT IS SO ORDERED this 12<sup>th</sup> day of June, 2019.

  
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SCOTT L. PALK  
UNITED STATES DISTRICT JUDGE